

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

We claim:

1. (currently amended): A method of occluding the ovarian pathway of a female body, said method comprising the steps of:

applying a heating element in the form of a catheter-mounted RF electrode array to a target segment of the pathway, and operating the heating element to heat the target segment in the pathway;

limiting the heating of the target segment by applying power of 0.1 to 5 watts to the heating element for a period of at least about 5 seconds;

installing a plug into the target segment of the pathway.

2. (currently amended): The method of claim 1, ~~additionally comprising the step of providing wherein the heating element is in the form of at least one electrode~~ the catheter-mounted RF electrode array adapted for application to the ovarian pathway.

3. (currently amended): The method of claim 2 ~~additionally comprising the step of 1, wherein operating the heating element further comprises~~ applying RF energy to the target segment through the electrode catheter-mounted RF electrode array.

4. (currently amended): The method of claim 1, ~~additionally comprising the step of providing the heating element in the form of at least two electrodes adapted for application to the ovarian pathway, and wherein operating the heating element further comprises~~ applying bi-polar RF energy to said electrodes the target segment through the catheter-mounted RF electrode array.

5. - 8. (canceled).

9. (original): The method of claim 1 additionally comprising the step of providing the plug in the form of a reticulated foam plug having pores with pore sizes in the range of 40 to 200 microns.

10. (original): The method of claim 1 additionally comprising the step of providing the plug in the form of a reticulated foam plug having pores with pore sizes in the range of 1 to 20 microns.

11. (original): The method of claim 9 additionally comprising the step of providing the foam plug in the form of silicone foam having a durometer value of 20-100 Shore A.

12. (original): The method of claim 9 additionally comprising the step of providing the foam plug in the form of silicone foam having a durometer value of about 60 Shore A.

13. (original): The method of claim 9 additionally comprising the step of providing the foam plug in the form of an ePTFE plug.

14. (original): The method of claim 9 additionally comprising the step of providing the foam plug in the form of an acrylic copolymer plug.

15. (original): The method of claim 10 additionally comprising the step of providing the foam plug in the form of silicone foam having a durometer value of 20-100 Shore A.

16. (original): The method of claim 10 additionally comprising the step of providing the foam plug in the form of silicone foam having a durometer value of about 60 Shore A.

17. (original): The method of claim 10 additionally comprising the step of providing the foam plug in the form of an ePTFE plug.

18. (original): The method of claim 10 additionally comprising the step of providing the foam plug in the form of an acrylic copolymer plug.

19. (currently amended): A method of occluding the ovarian pathway of a female body, wherein the ovarian pathway is lined by an epithelial layer on the inner surface of the ovarian pathway, and wherein the ovarian pathway is further characterized by a lamina propria layer surrounding the epithelial layer, a circular muscle layer surrounding the lamina propria layer and a longitudinal muscle layer surrounding the circular muscle layer, said method comprising the steps of:

applying a wounding element in the form of a catheter-mounted RF electrode array heating element and operating the wounding element to cause a wound in the segment of the pathway that necroses the epithelial layer;

limiting the outward extent of the wound to the circular muscle layer by limiting the heating of the target segment by applying power of 0.1 to 5 watts to the catheter-mounted RF electrode array heating element for a period of at least about 5 seconds;

installing a foam plug comprising a reticulated foam into the wounded segment of the pathway; and

allowing the wounded segment of the pathway to heal with the foam plug installed.

20. (currently amended): The method of claim 19, ~~additionally comprising the step of providing wherein the heating element~~ catheter-mounted RF electrode array is in the form of at least one electrode adapted for application to the ovarian pathway.

21. (currently amended): The method of claim 20 ~~additionally comprising the step of 19,~~ wherein operating the wounding element further comprises applying RF energy to the target segment through the ~~electrode~~ catheter-mounted RF electrode array.

22. (currently amended): The method of claim 19, ~~additionally comprising the step of providing the heating element in the form of at least two electrodes adapted for application to the ovarian pathway, and wherein operating the wounding element further comprises~~ applying bi-polar RF energy to said electrodes the catheter-mounted RF electrode array.

23. – 26. (canceled).

27. (original): The method of claim 19 additionally comprising the step of providing the plug in the form of a reticulated foam plug having pores with pore sizes in the range of 40 to 200 microns.

28. (original): The method of claim 19 additionally comprising the step of providing the plug in the form of a reticulated foam plug having pores with pore sizes in the range of 1 to 20 microns.

29. (original): The method of claim 27 additionally comprising the step of providing the foam plug in the form of silicone foam having a durometer value of 20-100 Shore A.

30. (original): The method of claim 27 additionally comprising the step of providing the foam plug in the form of silicone foam having a durometer value of about 60 Shore A.

31. (original): The method of claim 27 additionally comprising the step of providing the foam plug in the form of an ePTFE plug.

32. (original): The method of claim 27 additionally comprising the step of providing the foam plug in the form of an acrylic copolymer plug.

33. (original): The method of claim 28 additionally comprising the step of providing the foam plug in the form of silicone foam having a durometer value of 20-100 Shore A.

34. (original): The method of claim 28 additionally comprising the step of providing the foam plug in the form of silicone foam having a durometer value of about 60 Shore A.

35. (original): The method of claim 28 additionally comprising the step of providing the foam plug in the form of an ePTFE plug.

36. (original): The method of claim 28 additionally comprising the step of providing the foam plug in the form of an acrylic copolymer plug.

37. (currently amended): A method of occluding the ovarian pathway of a female body, the ovarian pathway being characterized by an epithelial layer lining the inside of the ovarian pathway, a lamina propria layer surrounding the epithelial layer, a circular muscle layer surrounding the lamina propria layer and a longitudinal muscle layer surrounding the circular muscle layer, said method comprising the steps of:

applying a heating element in the form of a catheter-mounted RF electrode array to a target segment of the pathway, and operating the heating element to heat the target segment in the pathway;

limiting the heating of the target segment to avoid wounding the longitudinal layer by limiting the heating of the target segment by applying power of 0.1 to 5 watts to the heating element for a period of at least about 5 seconds;

installing a plug into the target segment of the pathway.

38. (currently amended): The method of claim 37, ~~additionally comprising the step of providing wherein the heating element is~~ in the form of at least one electrode the catheter-mounted RF electrode array adapted for application to the ovarian pathway.

39. (currently amended): The method of claim 38 ~~additionally comprising the step of 37, wherein operating the heating element further comprises~~ applying RF energy to the target segment through the electrode catheter-mounted RF electrode array.

40. (currently amended): The method of claim 37, ~~additionally comprising the step of providing the heating element in the form of at least two electrodes adapted for application to the ovarian pathway, and wherein operating the heating element further comprises~~ applying bi-polar RF energy to said electrodes the target segment through the catheter-mounted RF electrode array.

41. – 44. (canceled).

45. (original): The method of claim 37 additionally comprising the step of providing the plug in the form of a reticulated foam plug having pores with pore sizes in the range of 40 to 200 microns.

46. (original): The method of claim 37 additionally comprising the step of providing the plug in the form of a reticulated foam plug having pores with pore sizes in the range of 1 to 20 microns.

47. (original): The method of claim 45 additionally comprising the step of providing the foam plug in the form of silicone foam having a durometer value of 20-100 Shore A.

48. (original): The method of claim 45 additionally comprising the step of providing the foam plug in the form of silicone foam having a durometer value of about 60 Shore A.

49. (original): The method of claim 45 additionally comprising the step of providing the foam plug in the form of an ePTFE plug.

50. (original): The method of claim 45 additionally comprising the step of providing the foam plug in the form of an acrylic copolymer plug.

51. (original): The method of claim 46 additionally comprising the step of providing the foam plug in the form of silicone foam having a durometer value of 20-100 Shore A.

52. (original): The method of claim 46 additionally comprising the step of providing the foam plug in the form of silicone foam having a durometer value of about 60 Shore A.

53. (original): The method of claim 46 additionally comprising the step of providing the foam plug in the form of an ePTFE plug.

54. (original): The method of claim 46 additionally comprising the step of providing the foam plug in the form of an acrylic copolymer plug.